SAFETY DATA SHEET
Magnesium Chloride

1. Identification

Product identifier
Product name Magnesium Chloride
Product number 10006978
CAS number 7786-30-3

Recommended use of the chemical and restrictions on use
Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet
Supplier Integrated DNA Technologies
1710 Commercial Park
Coralville Iowa, 52241

41 Science Park Road
#01-28 The Gemini
Singapore Science Park II
Singapore 117610
Republic of Singapore

Interleuvenlaan 12A
B-3001 Leuven
Belgium

6828 Nancy Ridge Drive
San Diego, California 92121
USA
custcare@idtdna.com

Manufacturer Integrated DNA Technologies
1710 Commercial Park
Coralville Iowa, 52241

41 Science Park Road
#01-28 The Gemini
Singapore Science Park II
Singapore 117610
Republic of Singapore

Interleuvenlaan 12A
B-3001 Leuven
Belgium

6828 Nancy Ridge Drive
San Diego, California 92121
USA
custcare@idtdna.com

Emergency telephone number
Emergency telephone ChemTrec 800-424-9300
2. Hazard(s) Identification

Classification of the substance or mixture

- OSHA Regulatory Status: This Product is Not Hazardous under the OSHA Hazard Communication Standard.
- Physical hazards: Not Classified
- Health hazards: Not Classified
- Environmental hazards: Not Classified

Indeling (classification)

Label elements

- Hazard statements: NC Not Classified

Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

3. Composition/information on ingredients

Substances

- Product name: Magnesium Chloride
- CAS number: 7786-30-3

4. First-aid measures

Description of first aid measures

General information: If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

Inhalation: No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues.

Ingestion: No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.

Skin Contact: No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.

Eye contact: Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.

Protection of first aiders: Use protective equipment appropriate for surrounding materials.

Most important symptoms and effects, both acute and delayed

General information: The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation: No specific symptoms known.

Ingestion: No specific symptoms known. May cause discomfort if swallowed.

Skin contact: Prolonged contact may cause dryness of the skin.

Eye contact: No specific symptoms known. May be slightly irritating to eyes.

Indication of immediate medical attention and special treatment needed

Notes for the doctor: Treat symptomatically.

Specific treatments: No special treatment required.

5. Fire-fighting measures

Extinguishing media
Magnesium Chloride

Suitable extinguishing media
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards
None known.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

Advice for firefighters

Protective actions during firefighting
Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions
No specific recommendations. For personal protection, see Section 8.

Environmental precautions
Avoid discharge into drains or watercourses or onto the ground.

Methods and material for containment and cleaning up

Methods for cleaning up
Reuse or recycle products wherever possible. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

Reference to other sections
For personal protection, see Section 8. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions
Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use.

Advice on general occupational hygiene
Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions
Store away from incompatible materials (see Section 10). No specific recommendations.

Storage class
Unspecified storage.

Specific end uses(s)
The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Exposure controls

Appropriate engineering controls
No specific ventilation requirements.

Eye/face protection
No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection
No specific hand protection recommended. Large Spillages: Wear protective gloves.
Magnesium Chloride

Hygiene measures: Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

Respiratory protection: No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls: Not regarded as dangerous for the environment.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Solid.

Color: White.

Odor: Odorless.

Odor threshold: Not available.

pH: Not available.

Melting point: 714°C

Initial boiling point and range: 1,412°C

Flash point: No specific test data are available.

Evaporation rate: Not available.

Evaporation factor: Not available.

Flammability (solid, gas): Not available.

Upper/lower flammability or explosive limits: Not available.

Other flammability: Not available.

Vapor pressure: Not available.

Vapor density: Not available.

Relative density: 2.32 g/mL at 25 °C (77 °F)

Bulk density: Not available.

Solubility(ies): 468.7 g/l at 20 °C (68 °F) - soluble

Partition coefficient: Not available.


Decomposition Temperature: Not available.

Viscosity: Not available.

Explosive properties: Not available.

Explosive under the influence of a flame: Not considered to be explosive.

Oxidizing properties: Not available.

10. Stability and reactivity

Reactivity: See the other subsections of this section for further details.

Stability: Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

Possibility of hazardous reactions: No potentially hazardous reactions known.
Magnesium Chloride

Conditions to avoid
There are no known conditions that are likely to result in a hazardous situation.

Materials to avoid
No specific material or group of materials is likely to react with the product to produce a hazardous situation.

Hazardous decomposition products
Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

11. Toxicological information

Information on toxicological effects

Toxicological effects
Not regarded as a health hazard under current legislation.

Acute toxicity - oral
Notes (oral LD₅₀)
Based on available data the classification criteria are not met.

Acute toxicity - dermal
Notes (dermal LD₅₀)
Based on available data the classification criteria are not met.

Acute toxicity - inhalation
Notes (inhalation LC₅₀)
Based on available data the classification criteria are not met.

Skin corrosion/irritation
Animal data
Based on available data the classification criteria are not met.

Serious eye damage/irritation
Based on available data the classification criteria are not met.

Respiratory sensitization
Based on available data the classification criteria are not met.

Skin sensitization
Based on available data the classification criteria are not met.

Germ cell mutagenicity
Genotoxicity - in vitro
Based on available data the classification criteria are not met.

Carcinogenicity
Carcinogenicity
Based on available data the classification criteria are not met.

IARC carcinogenicity
None of the ingredients are listed or exempt.

Reproductive toxicity
Reproductive toxicity - fertility
Based on available data the classification criteria are not met.

Reproductive toxicity - development
Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure
STOT - single exposure
Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure
STOT - repeated exposure
Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard
Not relevant. Solid.

General information
No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
No specific symptoms known.

Ingestion
No specific symptoms known. May cause discomfort if swallowed.
Magnesium Chloride

Skin Contact
Prolonged contact may cause dryness of the skin.

Eye contact
No specific symptoms known. May be slightly irritating to eyes.

Route of exposure
Ingestion Inhalation Skin and/or eye contact

Target Organs
No specific target organs known.

12. Ecological information

Ecotoxicity
Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Toxicity
Based on available data the classification criteria are not met.

Persistence and degradability
The degradability of the product is not known.

Bioaccumulative potential
No data available on bioaccumulation.

Mobility in soil
No data available.

Mobility
Not available.

13. Disposal considerations

Waste treatment methods
The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.

Disposal methods
Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

14. Transport information

General
The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN Number
Not applicable.

UN No. (International)
Not applicable.

UN No. (DOT)
Not applicable.

UN No. (IATA)
Not applicable.

UN proper shipping name
Not applicable.

Proper shipping name (International)
Not applicable.

Proper shipping name (DOT)
Not applicable.

Proper Shipping Name (IATA)
Not applicable.

Transport hazard class(es)
Not applicable.

Transport Labels (International)
No transport warning sign required.

IATA Hazard Class
Not applicable.
Magnesium Chloride

DOT transport labels
No transport warning sign required.

Packing group
Packing group (International) Not applicable.
DOT packing group Not applicable.
IATA Packing Group Not applicable.

Environmental hazards
Environmentally Hazardous Substance
No.

Special precautions for user
Not applicable.

DOT reportable quantity Not applicable.
DOT TIH Zone Not applicable.

Transport in bulk according to
Annex II of MARPOL 73/78 and
the IBC Code
Not applicable.

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
None of the ingredients are listed or exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed or exempt.

SARA 313 Emission Reporting
None of the ingredients are listed or exempt.

CAA Accidental Release Prevention
None of the ingredients are listed or exempt.

FDA - Essential Chemical
None of the ingredients are listed or exempt.

FDA - Precursor Chemical
None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories
None of the ingredients are listed or exempt.

OSHA - Highly Hazardous Chemicals
None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins
None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-I)
None of the ingredients are listed or exempt.
Magnesium Chloride

California Air Toxics "Hot Spots" (A-II)
None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances
None of the ingredients are listed or exempt.

Massachusetts "Right To Know" List
None of the ingredients are listed or exempt.

Rhode Island "Right To Know" List
None of the ingredients are listed or exempt.

Minnesota "Right To Know" List
None of the ingredients are listed or exempt.

New Jersey "Right To Know" List
None of the ingredients are listed or exempt.

Pennsylvania "Right To Know" List
None of the ingredients are listed or exempt.

Inventories
US - TSCA
None of the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
None of the ingredients are listed or exempt.

16. Other information

Abbreviations and acronyms used in the safety data sheet
TDG: The transport of dangerous goods act
IATA: International air transport association.
ICAO: Technical instructions for the safe transport of dangerous goods by air.
IMDG: International maritime dangerous goods.
CAS: Chemical abstracts service.
ATE: Acute toxicity estimate.
LC₅₀: Lethal concentration to 50% of a test population.
LD₅₀: Lethal dose to 50% of a test population (median lethal dose).
EC₅₀: 50% of maximal effective concentration.
PBT: Persistent, bioaccumulative and toxic substance.
vPvB: Very persistent and very bioaccumulative.

Training advice
Only trained personnel should use this material.

Revision date 6/7/2020
Revision 1

The information in this safety data sheet is, to the best of our knowledge, correct as of the date it was issued. We do not guarantee that this safety data sheet includes all the information necessary for your intended use. You (the user) are responsible for determining whether this material or product is suitable for your particular purpose.